

<p>86-165904/26 E12 G04 (E19) LIOY 19.10.84  LION CORP *J6 1098-798-A  19.10.84-JP-219791 (17.05.86) C11d-07/52 D06l-01/04  Dry cleaning compsn. protecting metal parts in appls. - comprises halogenated hydrocarbon surfactant and mixt. contg. imidazole cpd. and benzotriazole cpd.  C86-071191</p>	<p>E(6-D8, 7-D9C) G(4-88)</p>
<p>Dry cleaning compsn. comprises essentially  (A) a halogenated hydrocarbon;  (B) a surfactant; and  (C) a mixt. comprising  (C<sub>1</sub>) 70-95 wt.% of imidazole cpd. of formula (I) and  (C<sub>2</sub>) 30-5 wt.% of benzotriazole cpd. of formula (II)</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div data-bbox="178 462 406 619"> <p>(I)</p> <p>(sic)</p> </div> <div data-bbox="511 462 779 619"> <p>(II)</p> </div> </div> <p>R<sub>1</sub> - R<sub>3</sub> = each H or lower alkyl;</p>	<p>R<sub>4</sub> - R<sub>7</sub> = each H or lower alkyl; and  M is H or alkali metal.</p> <p><b>ADVANTAGES</b>  The dry cleaning compsn. has high washing power and protects metal parts in distillator to inhibit dissolution of metal and to prevent the colorisation and deterioration of the solvent.</p> <p><b>MATERIALS</b>  (A) is pref. (di)chloroethane, 1,1,1- or 1,1,2-trichloroethane, tetrachloroethylene or tetrachloromethane.  (B) is a cationic, a nonionic, an anionic or an amphoteric surfactant  (C<sub>1</sub>) is pref. imidazole, 2-methyl-, 2-ethyl- or 2-ethyl-4-methyl imidazole.  (C<sub>2</sub>) is pref. 1,2,3-benzotriazole or an alkali metal salt thereof, 4-methyl- or 5-methyl benzotriazole.  The cleaning compsn. is blended opt. with a solubiliser or a stabiliser (e.g. methyl alcohol, 2-propanol, polyethylene glycol, diethylene glycol monobutyl ether, n-hexane, methyl isobutyl ketone, etc.).</p> <p style="text-align: right;">J61098798-A*</p>

#### EXAMPLE

A dry cleaning compsn. was prepd. from ammonium alkylbenzenesulphonate (10 wt.%), Na phosphate of polyoxyethylene oleyl ether (P : 6) (10 wt.%), 2-methyl imidazole (0.35 wt.%), 1,2,3-benzotriazole (0.15 wt.%), tetrachloroethylene (74.5 wt.%) and ethylene glycol monobutyl ether (5 wt.%).

It had a washing power of 86% (calculated as the ratio of difference in the reflectivity of sample cloth before or after cleaning per difference of white control cloth before and after washing), a refouling inhibiting power of 99% (measured as the ratio of reflectivity of white wool textiles before and after washing) and did not attach substantially any Zn and Cu or did not colour the cleaning compsn.

When 0.05 wt.% of 1,2,3-benzotriazole was eliminated and 0.05 wt.% of the imidazole was added to the cleaning compsn., a washing power of 75%, a refouling inhibiting power of 91% and corrosion or discolouration were observed.  
(6ppW59JWDwgNo0/0).

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